

### **What is Claimed is:**

1. A computer-assisted schematic linking method for electronic components, comprising steps of:

5 establishing an electronic component specification data base according to a signal line naming convention;

selecting one or more first electronic component from the electronic component data base to generate a first electronic component list for users to select the first electronic component;

10 searching one or more second electronic component from the electronic component data base corresponding to the selected first electronic component;

providing a second electronic component list for users to select the second electronic component; and

processing schematic linking operation for the first electronic component and the second electronic component.

- 15 2. The method of claim 1, wherein circuit naming for the first electronic component is done according to the signal line naming convention.

3. The method of claim 1, wherein circuit naming for the second electronic component is done according to the signal line naming convention.

4. The method of claim 1, wherein the first electronic component list includes component name and attribute data of the first electronic component.

5. The method of claim 1, wherein the second electronic component list includes component name and attribute data of the second electronic component.

6. The method of claim 1, wherein the schematic linking operation for the first electronic component and the second electronic component includes generating a

result report.

7. The method of claim 6, wherein the result report includes reminding message data of errors occurred to the schematic linking of the first electronic component and the second electronic component.

5 8. The method of claim 1, wherein the establishing an electronic component specification data base according to a signal line naming convention further includes steps of:

establishing a user window interface;

adding and modifying specification data of an electronic component according to  
10 the signal line naming convention; and

updating the electronic component specification data in the electronic component specification data base.

9. The method of claim 8, wherein the modifying specification data of an electronic component according to the signal line naming convention further includes  
15 comparing and confirming conformation of the electronic component specification data to the signal line naming convention.